

CLAIMS

What is claimed is:

Sub. as

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1. An interactive case-based system for video-centric professional development of users by teacher-users, the interactive system comprising:

a. a computer system including a processor for executing programs and a memory for storing programs, with the computer system having at least one display and at least one input element;

b. the computer system further comprising:

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i. a media database for storing at least one time-indexed digital video case, optionally at least one time-indexed text track with each text track corresponding to a digital video case, and with the time-indexes of the text track corresponding to time-indexes of the digital video case; the media database further, and optionally, including a time-indexed table of contents for each digital video case, digital resources relevant to each digital video case, and commentary relevant to each digital video case;

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ii. a video assignment database for storing at least one video case exercise and at least one video case user response;

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iii. an administration database for storing user access permissions and system settings;

iv. a user database for storing personal user notes; and

v. a lesson database for storing lessons including a combination of items from the media database, the video assignment database, and the administration database that are organized to create a video-based lesson, and for storing groups of related lessons as courses; and

c. a lesson building program for allowing a teacher-user to combine elements from the media database, the video assignment database, and the administration database to create a case-based video lesson therefrom and to store the lessons within the lesson database, the lesson building program further allowing the teacher-user to add elements to, to delete elements from, and to alter elements within the media database, the video assignment database, and the administration database; the lesson building program further allowing the teacher-user to organize lessons and exercises to create courses, each including a plurality of lessons; and

d. a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries into a notebook of personal user notes.

2. An interactive, case-based system for video-centric professional development of users by teacher-users, the interactive system comprising:

- a. a computer network including a server system and at least one client system, with the server system and each respective client system including a processor for executing programs, a memory for storing programs, and input and output devices for interconnecting the server system and client systems;
- b. at least one of the server system and client systems including at least one display for providing output to a user and a user input device;
- c. the server system further comprising:
 - i. a media database for storing at least one time-indexed digital video case, optionally at least one time-indexed text track with each text track corresponding to a digital video case, and with the time-indexes in the text tracks corresponding to time-indexes of the digital video case; the media database further, and optionally, including a time-indexed table of contents for each digital video case, digital resources relevant to each digital video case, and commentary relevant to each digital video case;
 - ii. a video assignment database for storing at least one video case exercise and at least one video case user responses;
 - iii. an administration database for storing user access permissions and system settings;
 - iv. a user database for storing personal user notes; and
 - v. a lesson database for storing lessons including a combination of items from the media database, the video assignment database, and

the administration database that are organized to create a video-based lesson, and for storing groups of related lessons as courses; and

- vi. a lesson building program for allowing a teacher-user to combine elements from the media database, the video assignment database, and the administration database to create a case-based video lesson therefrom and to store the lessons within the lesson database, the lesson building program further allowing the teacher-user to add elements to, to delete elements from, and to alter elements within the media database, the video assignment database, and the administration database; the lesson building program further allowing the teacher-user to organize lessons and exercises to create courses, each including a plurality of lessons; and

d. the client computers further including:

- i. a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries into a notebook of personal user notes.

- 3. An interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 2, wherein server system further includes a

web server system for serving lessons to the client computers, and wherein the lesson viewer program on the client computers is a web browser.

4. An interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 3, wherein the digital video cases are stored locally on the client systems to minimize the information transfer across the network during lessons.
5. An interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 4, where the digital video cases are provided on a storage medium selected from the group consisting of hard disks, optical disks, magnetic disks, and magnetic tapes.
6. An interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 4, wherein the digital video cases are downloaded from the server system onto the client systems so that they may be played back locally during lessons.
7. An interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 2, wherein the server system further comprises a video and index builder, whereby a teacher-user can build a time-coded text track, a time-coded index, and a time-coded table of contents for a time-coded digital video case.

8. An interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 7, further including means for uploading digital video cases, time-coded text tracks, time-coded indexes, and time-coded tables of contents from the client computers to the server computer for use by a teacher-user in creating a lesson.

9. An interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 2, wherein the lesson exercises include requests for user input in the form of questions and time-indexed video case answers and marking codes, wherein the lesson exercises may be configured to allow time-indexed video case user responses to be viewable only by the user or by a plurality of users and to be applicable to only one lesson or to a plurality of lessons, and wherein lesson exercises can optionally accommodate the use of file attachments to allow for uploading time-indexed video case answers from the client systems to the server system.

10. A client system for an interactive, case-based system for video-centric professional development of users by teacher-users, wherein the interactive system includes a server system including a processor for executing programs, a memory for storing programs, and input and output devices for connecting with at least one client system, the server system further including a media database for storing at least one time-indexed digital video case, optionally at least one time-

indexed text tracks with each text track corresponding to a digital video case, and with the time-indexes in the text track corresponding to time-indexes of the digital video case; the media database further, and optionally, including a time-indexed table of contents for each digital video case, digital resources relevant to each digital video case, and commentary relevant to each digital video case; a video assignment database for storing at least one exercise and at least one user response; an administration database for storing user access permissions and system settings; a user database for storing personal user notes; and a lesson database for storing lessons including a combination of items from the media database, the video assignment database, and the administration database that are organized to create a video-based lesson, and for storing groups of related lessons as courses; and a lesson building program for allowing a teacher-user to combine elements from the media database, the video assignment database, and the administration database to create a case-based video lesson therefrom and to store the lessons within the lesson database, the lesson building program further allowing the teacher-user to add elements to, to delete elements from, and to alter elements within the media database, the video assignment database, and the administration database; the lesson building program further allowing the teacher-user to organize lessons and exercises to create courses, each including a plurality of lessons, the client computer comprising:

- a. a computer system including a processor for executing programs, a memory for storing programs, input and output devices for communicating

with the server system, and at least one display for providing output to a user and a user input device;

- b. the client computer further including a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries into a notebook of personal user notes.

11. A client system for an interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 10, wherein the lesson viewer program on the client computers is a web browser.

12. A client system for an interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 11, wherein the digital video cases are stored locally on the client systems to minimize the information transfer across the network during lessons.

13. A client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 12, where the digital video cases are provided on a storage medium selected from the group consisting of hard disks, optical disks, magnetic disks, and magnetic tapes.

14. A client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 12, wherein the digital video cases are downloaded from the server system onto the client systems so that they may be played back locally during lessons.

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15. A client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 10, further including means for uploading digital video cases, time-coded text tracks, time-coded indexes, and time-coded tables of contents from the client computers to the server computer for use by a teacher-user in creating a lesson.

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16. A client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 10, wherein the lesson exercises include requests for user input in the form of questions and answers and marking codes, wherein the lesson exercises may be configured to allow user responses to be viewable only by the user or by a plurality of users and to be applicable to only one lesson or to a plurality of lessons, and wherein lesson exercises can optionally accommodate the use of file attachments to allow for uploading answers from the client systems to the server system.

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17. A server system for an interactive, case-based system for video-centric professional development of users by teacher-users, wherein the interactive system includes at least one client system, each client system including a

processor for executing programs, a memory for storing programs, input and output devices for connecting with the server system, a display for providing output to a user, a user input device, and a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries into a notebook of personal user notes, the server system comprising:

- a. a computer including a including a processor for executing programs, a memory for storing programs, and input and output devices for interconnecting the server system and client systems;
- b. the server system further comprising:
 - i. a media database for storing at least one time-indexed digital video case, optionally at least one text tracks with each text track corresponding to a digital video case, and with the time-indexes in the text track corresponding to time-indexes of the digital video case; the media database further, and optionally, including a time-indexed table of contents for each digital video case, digital resources relevant to each digital video case, and commentary relevant to each digital video case;
 - ii. a video assignment database for storing at least one exercise and at least one user response;

iii. an administration database for storing user access permissions and system settings;

iv. a user database for storing personal user notes; and

v. a lesson database for storing lessons including a combination of

5 items from the media database, the video assignment database, and the administration database that are organized to create a video-based lesson, and for storing groups of related lessons as courses; and

c. a lesson building program for allowing a teacher-user to combine elements
10 from the media database, the video assignment database, and the administration database to create a case-based video lesson therefrom and to store the lessons within the lesson database, the lesson building program further allowing the teacher-user to add elements to, to delete elements from, and to alter elements within the media database, the video
15 assignment database, and the administration database; the lesson building program further allowing the teacher-user to organize lessons and exercises to create courses, each including a plurality of lessons.

18. A server system for an interactive, case-based system for video-centric

20 professional development of teacher-users, as set forth in claim 17, wherein server system further includes a web server system for serving lessons to the client computers, and wherein the lesson viewer program on the client computers is a web browser.

19. A server system for an interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 18, wherein the digital video cases are stored locally on the client systems to minimize the information transfer across the network during lessons.

20. A server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 19, where the digital video cases are provided on a storage medium selected from the group consisting of hard disks, optical disks, magnetic disks, and magnetic tapes.

21. A server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 19, wherein the digital video cases are downloaded from the server system onto the client systems so that they may be played back locally during lessons.

22. A server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 17, wherein the server system further comprises a video and index builder, whereby a teacher-user can build a time-coded text track, a time-coded index, and a time-coded table of contents for a time-coded digital video case.

23. A server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 22, further including means for uploading digital video cases, time-coded text tracks, time-coded indexes, and time-coded tables of contents from the client computers to the server computer for use by a teacher-user in creating a lesson.

24. An interactive, case-based method for providing video-centric professional development of users by teacher-users, the method comprising the steps of:

- a. providing a computer system including a processor for executing programs and a memory for storing programs, with the computer system having at least one display and an input element;
- b. providing a media database on the computer system for storing at least one time-indexed digital video case, optionally at least one text track with each text track corresponding to a digital video case, and with the time-indexes of the video text track corresponding to time-indexes of the digital video case; the media database further, and optionally, including a time-indexed table of contents for each digital video case, digital resources relevant to each digital video case, and case commentary relevant to each digital video case;
- c. providing a video assignment database on the computer system for storing at least one exercise and at least one user response;
- d. providing an administration database on the computer system for storing user access permissions and system settings;

- e. providing a user database on the computer system for storing personal user notes; and providing a lesson database on the computer system for storing lessons including a combination of items from the media database, the video assignment database, and the administration database that are organized to create a video-based lesson, and for storing groups of related lessons as courses;
- f. providing a lesson building program for allowing a teacher-user to combine elements from the media database, the video assignment database, and the administration database to create a case-based video lesson therefrom and to store the lessons within the lesson database, the lesson building program further allowing the teacher-user to add elements to, to delete elements from, and to alter elements within the media database, the video assignment database, and the administration database; the lesson building program further allowing the teacher-user to organize lessons and exercises to create courses, each including a plurality of lessons; and
- g. providing a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries into a notebook of personal user notes.

25. An interactive, case-based method for video-centric professional development of users by teacher-users, the method comprising the steps of:

a. providing a computer network including a server system and at least one client system, with the server system and each respective client system including a processor for executing programs, a memory for storing programs, and input and output devices for interconnecting the server system and client systems, with at least one of the server system and client systems including at least one display for providing output to a user and a user input device;

b. providing, on the server system:

i. a media database for storing at least one time-indexed digital video case, optionally at least one text track with each text track corresponding to a digital video case, and with the time-indexes in the video text track corresponding to time-indexes of the digital video case; the media database further, and optionally, including a time-indexed table of contents for each digital video case, digital resources relevant to each digital video case, and commentary relevant to each digital video case;

ii. a video assignment database for storing at least one exercise and at least one user response;

iii. an administration database for storing user access permissions and system settings;

iv. a user database for storing personal user notes; and

v. a lesson database for storing lessons including a combination of items from the media database, the video assignment database, and the administration database that are organized to create a video-based lesson, and for storing groups of related lessons as courses; and

vi. a lesson building program for allowing a teacher-user to combine elements from the media database, the video assignment database, and the administration database to create a case-based video lesson therefrom and to store the lessons within the lesson database, the lesson building program further allowing the teacher-user to add elements to, to delete elements from, and to alter elements within the media database, the video assignment database, and the administration database; the lesson building program further allowing the teacher-user to organize lessons and exercises to create courses, each including a plurality of lessons; and

c. providing on the client computers:

i. a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries in a notebook of personal user notes.

26. An interactive, case-based method for video-centric professional development of teacher-users, as set forth in claim 25, further including the step of providing the server system with a web server system for serving lessons to the client computers, and wherein the lesson viewer program provided on the client computers is a web browser.

27. An interactive, case-based method for video-centric professional development of teacher-users, as set forth in claim 26, wherein the digital video cases are stored locally on the client systems to minimize the information transfer across the network during lessons.

28. An interactive, case-based method for video-centric professional development of teacher-users, as set forth in claim 27, where the digital video cases are provided on a storage medium selected from the group consisting of hard disks, optical disks, magnetic disks, and magnetic tapes.

29. An interactive, case-based method for video-centric professional development of teacher-users, as set forth in claim 27, wherein the digital video cases may be downloaded from the server system onto the client systems so that they can be played back locally during lessons.

30. An interactive, case-based method for video-centric professional development of teacher-users, as set forth in claim 25, further including the step of providing the

server system with a video and index builder, whereby a teacher-user can build a time-coded text tracks, a time-coded index, and a time-coded table of contents for a time-coded digital video case.

5 31. An interactive, case-based method for video-centric professional development of teacher-users, as set forth in claim 30, further including the step of providing means for uploading digital video cases, time-coded text tracks, time-coded indexes, and time-coded tables of contents from the client computers to the server computer for use by a teacher-user in creating a lesson.

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32. An interactive, case-based method for video-centric professional development of teacher-users, as set forth in claim 25, wherein the lesson exercises include requests for user input in the form of questions and answers and marking codes, wherein the lesson exercises may be configured to allow user responses to be viewable only by the user or by a plurality of users and to be applicable to only one lesson or to a plurality of lessons, and wherein lesson exercises can optionally accommodate the use of file attachments to allow for uploading answers from the client systems to the server system.

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20 33. A method of providing a client system for an interactive, case-based system for video-centric professional development of users by teacher-users, wherein the interactive system includes a server system including a processor for executing programs, a memory for storing programs, and input and output devices for

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- a. providing a computer system including a processor for executing programs, a memory for storing programs, input and output devices for communicating with the server system, and at least one display for providing output to a user and a user input device;
 - b. providing, on the client system, a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries in a notebook of personal user notes.
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34. A method of providing a client system for an interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 33, wherein the lesson viewer program provided on the client computers is a web browser.

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35. A method of providing a client system for an interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 34, further including the step of providing means whereby digital video cases may be stored locally on the client systems to minimize the information transfer across the network during lessons.

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36. A method of providing a client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 35, where the digital video cases are provided on a storage medium selected from the group consisting of hard disks, optical disks, magnetic disks, and magnetic tapes.

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37. A method of providing a client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 35, further including the step of providing means by which the digital video cases may be downloaded from the server system onto the client systems so that they may be played back locally during lessons.

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38. A method of providing a client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 33, further including the step of providing means for uploading digital video cases, time-coded text tracks, time-coded indexes, and time-coded tables of contents from the client computers to the server computer for use by a teacher-user in creating a lesson.

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39. A method of providing a client system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 33, wherein the lesson exercises include requests for user input in the form of questions and answers and marking codes, wherein the lesson exercises may be configured to allow user responses to be viewable only by the user or by a

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plurality of users and to be applicable to only one lesson or to a plurality of lessons, and wherein lesson exercises can optionally accommodate the use of file attachments to allow for uploading answers from the client systems to the server system.

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40. A method for providing a server system for an interactive, case-based system for video-centric professional development of users by teacher-users, wherein the interactive system includes at least one client system, each client system including a processor for executing programs, a memory for storing programs, input and output devices for connecting with the server system, a display for providing output to a user, a user input device, and a lesson viewer program for allowing a user to view and navigate through the courses and lessons to select a lesson to perform, to navigate through and view the elements of the lesson to perform, and to provide input into the video assignments in the form of responses to exercises and to view, create, and edit entries in a notebook of personal user notes, the method of providing the server system comprising:

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a. providing a computer including a including a processor for executing programs, a memory for storing programs, and input and output devices for interconnecting the server system and client systems;

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b. providing the server system with:

i. a media database for storing at least one time-indexed digital video case, optionally at least one time-indexed text track with each text track corresponding to a digital video case, and with the

time-indexes in the video text tracks corresponding to time-indexes of the digital video case; the media database further, and optionally, including a time-indexed table of contents for each digital video case, digital resources relevant to each digital video case, and commentary relevant to each digital video case;

- ii. a video assignment database for storing at least one exercise and at least one user response;
- iii. an administration database for storing user access permissions and system settings;
- iv. a user database for storing personal user notes; and
- v. a lesson database for storing lessons including a combination of items from the media database, the video assignment database, and the administration database that are organized to create a video-based lesson, and for storing groups of related lessons as courses; and

- c. a lesson building program for allowing a teacher-user to combine elements from the media database, the video assignment database, and the administration database to create a case-based video lesson therefrom and to store the lessons within the lesson database, the lesson building program further allowing the teacher-user to add elements to, to delete elements from, and to alter elements within the media database, the video assignment database, and the administration database; the lesson building

program further allowing the teacher-user to organize lessons and exercises to create courses, each including a plurality of lessons.

5 41. A method for providing a server system for an interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 40, further comprising the step of providing the server system with a web server system for serving lessons to the client computers, and wherein the lesson viewer program on the client computers is a web browser.

10 42. A method for providing a server system for an interactive, case-based system for video-centric professional development of teacher-users, as set forth in claim 41, further comprising means for storing the digital video cases locally on the client systems to minimize the information transfer across the network during lessons.

15 43. A method for providing a server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 42, where the digital video cases are provided on a storage medium selected from the group consisting of hard disks, optical disks, magnetic disks, and magnetic tapes.

20 44. A method for providing a server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 42, further comprising the step of providing means for downloading the digital video

cases from the server system onto the client systems so that they may be played back locally during lessons.

5 45. A method for providing a server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 40, further comprising the step of providing the server system with a video and index builder, whereby a teacher-user can build a time-coded text track, a time-coded index, and a time-coded table of contents for a time-coded digital video case.

10 46. A method for providing a server system for an interactive, case-based system for video-centric professional development of teacher-users as set forth in claim 45, further comprising the step of providing means for uploading digital video cases, time-coded text tracks, time-coded indexes, and time-coded tables of contents from the client computers to the server computer for use by a teacher-user in
15 creating a lesson.